

REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1, 3, 5-9, 11, 14-17, 19-24, 26, and 28-47 are pending.

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35 U.S.C. §103 Claim Rejections

Claims 1, 3, 5-9, 11, 14-17, 19-24, 26, and 28-47 are rejected under 35 U.S.C. §103(a) for obviousness over Applicant's Fig.1 in view of U.S. Patent No. 6,081,902 to Cho (hereinafter, "Cho") (*Office Action* p.2).

10 Applicant respectfully traverses the rejection.

In independent claims 1, 8, 16, 22, and 28, Applicant claims that a graphical display is turned off before an operating system is shutdown in a computing device. Further, Applicant submitted new claims 31-47 in the 15 Preliminary Amendment filed June 10, 2004, that expressly recite a combination of features suggested by the Examiner in a teleconference on June 9, 2004. Applicant expressly claims that when an input is received to shutdown a computing device, a graphical display of the computing device is turned off first, an operating system running on the computing device is shut 20 down second (i.e., after the graphical display is turned off), and third, power to operate the computing device is turned off.

The Office continues to maintain the rejection of the pending claims over the single reference Cho which does not teach this combination of features. Cho only describes that display screen power is shutdown just before 25 the computer system power is cut off to prevent flicker and damaging the display screen with an abrupt electrical surge (*Cho* col.3, line 35 to col.4, line 24). Cho simply sends an interrupt signal (S200, Fig. 4) to output a display

power shutdown signal (S220, Fig. 5) to shutdown various signals of the display (S222-S227, Fig. 6). Cho also indicates several milliseconds delay between the various shutdown signals of the display (see Fig. 6).

When the display is shutdown, a display power shutdown completion signal is output (S227, Fig. 6), then a display power shutdown confirm signal is output (S240, Fig. 5), and then a system power off signal is output (S400, Fig. 4) to cut off the computer power. However, Cho does not indicate any sort of delay between the display power shutdown completion signal and the output of the system power off signal. Accordingly, Cho has not considered or provided any time to shut down an operating system or any other executable process that may be running on the computing device after the display has been shutdown.

The Office now recognizes that Cho does not teach an operating system being shut down after a graphical display has been turned off (*Office Action* p.3). The Office states "Cho discloses that a micom 20 (microcomputer) first sends out a signal to cut off power to a liquid crystal display 70 and then sends out a signal to cut off power to the entire system (col.4, lines 21-24)". Cho is directed to the power shutdown of a computer system, and the "system" referenced in Cho is the hardware power system of a notebook computer. There is no reference or indication whatsoever of shutting down an operating system or other executable processes in Cho.

Even though the Office recognizes that Cho does not teach an operating system being shut down after a graphical display has been turned off, that Cho is directed only to shutting down the hardware power system of a computer, and even though Cho provides no time to shut down an operating system after the display has been shutdown, the Office now contends that it would have been obvious to cut off power to the display first before the shutdown of an

operating system because of the shutdown processing as taught by Cho (*Office Action* p.3). Applicant respectfully disagrees with this assumption of obviousness.

Cho and/or Applicants Fig. 1 does not provide any basis to conclude that 5 it would be obvious to turn off a graphical display before shutting down an operating system running on a computing device. Applicant submits that the Office is improperly relying upon the disclosure of the subject application to interpret a non-existent feature of Cho as a basis to substantiate a rejection of the subject application. Merely concluding that it would be obvious to modify 10 Cho or Applicant's Fig. 1 with the disclosure of the subject application is not a proper basis to substantiate a rejection. Accordingly, Applicant respectfully submits that a *prima facie* rejection of the pending claims has not been provided, and requests that the Office withdraw the §103 rejection.

Further, if the Examiner has personal knowledge of prior art that would 15 substantiate the §103 rejection and the suggested obvious combination of features, he is asked to provide an affidavit under 37 C.F.R. §1.104(d)(2) to specifically describe such prior art. In the absence of an affidavit or another reference that may be combined with Cho, pending claims 1, 3, 5-9, 11, 14-17, 19-24, 26, and 28-47 should be allowed.

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Claim 1 recites a portable computing device comprising "a selectable control configured to initiate a shutdown of an operating system running on the portable computing device", and "a component configured to turn off the graphical display and conserve the power to operate the graphical display when 25 the selectable control is selected and before the shutdown of the operating system running on the portable computing device is initiated."

As described above, Cho and/or Applicant's Fig. 1 does not teach or suggest that a graphical display is turned off before the operating system is shutdown, as recited in claim 1. Further, Cho makes no mention of conserving power to operate the graphical display, as recited in claim 1. Cho only 5 describes shutting down a display screen power just before the computer system power is cut off.

Accordingly, claim 1 along with dependent claims 3 and 5-7 are allowable over Cho, and Applicant respectfully requests that the §103 rejection be withdrawn.

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Claim 8 recites an electronic device comprising "a selectable control configured to initiate a shutdown of an operating system running on the electronic device", and "a component configured to turn off the graphical display when the selectable control is selected and before the shutdown of the 15 operating system running on the electronic device is initiated."

As described above in the response to the rejection of claim 1, Cho and/or Applicant's Fig. 1 does not teach or suggest that a graphical display is turned off before the operating system is shutdown, as recited in claim 8. Accordingly, claim 8 along with dependent claims 9, 11, and 14-15 are 20 allowable over Cho, and the §103 rejection should be withdrawn.

Claim 16 recites a display device comprising "a graphical display" and "a display component configured to turn off the graphical display when an operating system shutdown control is selected and before a process to 25 shutdown the operating system is initiated."

As described above in the response to the rejection of claim 1, Cho and/or Applicant's Fig. 1 does not teach or suggest that a graphical display is

turned off before a process to shutdown the operating system is initiated, as recited in claim 16. Accordingly, claim 16 along with dependent claims 17 and 19-21 are allowable over Cho, and the §103 rejection should be withdrawn.

5 Claim 22 recites a method comprising "initiating a shutdown of an operating system running on a computing device", and "turning off a graphical display of the computing device to conserve power that operates the graphical display when the selectable control is selected and before initiating the shutdown of the operating system running on the computing device."

10 As described above in the response to the rejection of claim 1, Cho and/or Applicant's Fig. 1 does not teach or suggest turning off a graphical display before initiating a shutdown of an operating system running on a computing device, and does not teach or suggest conserving power to operate the graphical display, as recited in claim 22. Accordingly, claim 22 along with 15 dependent claims 23-24 and 26 are allowable over Cho, and the §103 rejection should be withdrawn.

20 Claim 28 recites "turning off a graphical display of the portable computing device to conserve power to operate the graphical display when the operating system selectable control is selected and before initiating the shutdown of the operating system running on the portable computing device."

25 As described above in the response to the rejection of claim 1, Cho and/or Applicant's Fig. 1 does not teach or suggest turning off a graphical display before initiating a shutdown of an operating system running on a portable computing device, and does not teach or suggest to conserve power to operate the graphical display, as recited in claim 28. Accordingly, claim 28

along with dependent claims 29-30 are allowable over Cho, and the §103 rejection should be withdrawn.

5 Claim 31 recites a computing device comprising “a power source configured to power the graphical display”, and “a component configured to turn off the graphical display and conserve the power before shutdown of an operating system running on the computing device.”

As described above, Cho and/or Applicant's Fig. 1 does not teach or suggest that a graphical display is turned off before shutdown of an operating system, as recited in claim 31. Further, Cho makes no mention of conserving power to operate the graphical display, as recited in claim 31. Cho only describes shutting down a display screen power just before the computer system power is cut off.

10 Accordingly, claim 31 along with dependent claims 32-35 are allowable over Cho, and Applicant respectfully requests that the §103 rejection be withdrawn.

15 Claim 36 recites a method comprising “turning off a graphical display of a computing device to conserve power when the shutdown process is initiated”, and “shutting down an operating system running on the computing device after turning off the graphical display.”

20 As described above in the response to the rejection of claim 31, Cho and/or Applicant's Fig. 1 does not teach or suggest “shutting down an operating system running on the computing device after turning off the graphical display”, and does not teach or suggest to conserve power, as recited in claim 36. Accordingly, claim 36 along with dependent claims 37-39 are allowable over Cho, and the §103 rejection should be withdrawn.

Claim 40 recites to “turn off a graphical display of the computing device to conserve power when the shutdown process is initiated”, and “shutdown an operating system running on the computing device after the graphical display is turned off.”

As described above in the response to the rejection of claim 31, Cho and/or Applicant’s Fig. 1 does not teach or suggest to “shutdown an operating system running on the computing device after the graphical display is turned off”, and does not teach or suggest to turn off a graphical display to conserve power, as recited in claim 40. Accordingly, claim 40 along with dependent claims 41-43 are allowable over Cho, and the §103 rejection should be withdrawn.

Claim 44 recites a computing device comprising “means to turn off a graphical display of the computing device to conserve power when the shutdown process is initiated”, and “means to shutdown an operating system running on the computing device after the graphical display is turned off.”

As described above in the response to the rejection of claim 31, Cho and/or Applicant’s Fig. 1 does not teach or suggest “to shutdown an operating system running on the computing device after the graphical display is turned off”, and does not teach or suggest to turn off a graphical display to conserve power, as recited in claim 44. Accordingly, claim 44 along with dependent claims 45-47 are allowable over Cho, and the §103 rejection should be withdrawn.

Conclusion

Pending claims 1, 3, 5-9, 11, 14-17, 19-24, 26, and 28-47 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. If any issues remain that preclude issuance of this application, the Examiner is urged to contact the undersigned attorney before issuing a subsequent Action.

Respectfully Submitted,

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Dated: Oct 1, 2004By: 

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